

## SOME NEW BUTTERFLIES AND MOTHS FROM EASTERN NEW GUINEA.

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(With six text-figures.)

WHERE not otherwise stated, the specimens here described were obtained by Mr. A. F. Eichhorn on his trip to the Herzog (= Hertzog) Mts., situated inland from Huon Gulf on the south side of the Markham (= Wussi) River. The collection made during this expedition was but a small one, as a serious illness cut short Mr. Eichhorn's activities and necessitated his removal to the coast by aeroplane. Though he has not yet entirely regained the use of the right arm, we are very glad to know that Mr. A. F. Eichhorn is progressing favourably. He has our cordial good wishes for a complete recovery.

As was to be expected, the collection from the higher altitude (6,100 ft.) consists chiefly of *Delias*, among which we find representatives of several new subspecies, and of *Satyrinae* of the genera *Erycinidia*, *Pieridopsis* and *Platyphima*, described by us in 1905 and all confined to the mountains of New Guinea. The series of *Platyphima decolor* R. & J. 1905, of which only one specimen was known, includes both sexes, the female being rather paler than the male, but bearing, on the underside of the hindwing, the same conspicuous, forked, white band. There is also a series of *P. homochroa homochroa* R. & J. 1907, described from a pair collected by A. S. Meek on the Biagi R.

### PIERIDAE.

#### 1. *Delias clathrata limata* subsp. nov.

♂. **Upperside**; forewing with 6 subapical-submarginal dots, of which the 3 posterior ones minute; black area slightly reduced; white spots outside discocellulars triangular, longer than broad, touching each other at black discocellular spot.

On **underside** the white discal band of forewing anteriorly narrower than in *D. c. clathrata* R. & J. 1904; on hindwing the white subbasal bar narrower, suffused with yellow, this yellow colouring less conspicuous than in *D. c. clathrata*; black discal blotches on the whole smaller, particularly the fourth.

♀. **Upperside**; forewing: black area more extended, the three discal blotches from M<sup>1</sup> forward vestigial, being much dimmed by black sealing.

**Underside**; forewing: white discal band anteriorly narrower than in *D. c. clathrata*, the costal spot isolated, the second usually missing.

In one ♀ the upperside of forewing slightly yellow and the white discal band of forewing beneath not narrower than in some specimens of *D. c. clathrata*.

*Hab.* Eastern New Guinea: West side of Herzog (= Hertzog) Mts., Edie R., 6,100 ft., 1 ♂ (type), 6♀♀.

2. *Delias mira excelsa* subsp. nov.

♂. Upperside; forewing: white area larger than in *D. m. mira* R. & J. 1904 and *D. m. reversa* Roths. 1925, nearly filling the entire cell, with the exception of one specimen, in which apical fourth of cell is black.

Underside; anal area of hindwing brighter yellow than in the other two known subspecies mentioned, penetrating farther basad at abdominal margin, abdominal marginal area shaded with yellow, black termen on the whole narrower.

♀. Upperside; white area of forewing extending beyond base of  $M^2$ , the greater portion of the cell being white; on hindwing the white area less large than in *D. m. mira* ♀ (this sex of *D. m. reversa* not known), reaching to lower angle of cell, only in one ♀ a little beyond.

Underside; anal area of hindwing as in ♂ brighter yellow; small costal dot outside black oblique stripe yellowish.

*Hab.* Eastern New Guinea: West side of Herzog Mts., Edie Creek, 6,100 ft., 6 ♂♂, 7♀♀.

3. *Delias callima satura* subsp. nov.

♂. Underside; red markings of hindwing much less bright than in *D. c. callima* R. & J. 1905, of about the same dull tint as in *D. bornemanni keysseri* Roths. 1925, larger than in *D. c. callima*, discal band broader than black interspace between it and cell-patch and than black terminal border, spots 1 and 2 of this band smaller than 3 to 5, some red scales between band and cell-patch.

*Hab.* Eastern New Guinea: West side of Herzog Mts., Edie Creek, 6,100 ft., 1 ♂ (type); and Watut R. to Buiang, 3,200 to 5,400 ft., 1 battered ♂.

4. *Delias bornemanni entima* subsp. nov.

♂♀. On upperside similar to *D. b. keysseri* Roths. 1925 and *D. b. aegle* Joicey & Talb. 1922, but on underside closely resembling *D. b. rubrina* Eecke 1915, the white on upperside of forewing more restricted than in *rubrina* and the red markings of underside of hindwing much larger than in *aegle* and *keysseri*.

♂. White area of forewing, above, reaching to base of  $M^1$  or nearly.—Black terminal border, as in *D. b. aegle*, anteriorly broader than in *D. b. rubrina*.

On underside the white streak along hindmargin of forewing as in *D. b. keysseri* and *D. b. aegle*, shorter than in *D. b. rubrina*.—Markings of hindwing dull red as in *D. b. rubrina*, and about as large: cell-spot much longer than its distance from their submarginal spot, the black discal area being very much smaller than in *D. b. keysseri* and *D. b. aegle*, being proximally of third submarginal spot about as wide as black abdominal marginal border, often much narrower; in most specimens a red spot in angle  $R^1-R^2$ .

♀. White area of forewing, above, extending to or beyond base of  $M^2$ , but not reaching  $M^3$ , usually slightly yellowish.

Red markings of underside as in ♂.

*Hab.* Eastern New Guinea: West side of Herzog Mts., Edie Creek, 6,100 ft., 11 ♂♂, 5♀♀ (type ♂); Watut R. to Buiang, 3,200 to 5,400 ft., 4 ♂♂, 1♀.

5. *Delias cuningputi aemula* subsp. nov.

♂. Upperside: white area of forewing wider than in *D. c. cuningputi* Ribbe 1900, extending 1.5 to 2.5 mm. beyond upper angle of cell, its distance from fringe of termen being 2.5 to 3.0 mm. before tornus.—Black terminal band of

hindwing nearly 5 mm. broad at  $SC^2$  (below apex), its inner margin rather strongly undulating.

Underside: yellow markings brighter than in *D. c. cuningputi* and double spot at  $\frac{3}{4}$  of costa of forewing larger.

*Hab.* Eastern New Guinea: West side of Herzog Mts., Edie Creek, 6,100 ft., 4 ♂♂.

#### 6. *Delias pheres endela* subsp. nov.

♂. Upperside as in *D. ph. hyperapproximata* Roths. 1925; terminal band of hindwing a trifle broader, less broken up posteriorly.

Underside.—Forewing black, the white area of the other subspecies suppressed, but paler black than terminal band, only a streak along hindmargin white, between  $M^1$  and  $M^2$  some white or yellow scaling in 3 of the 4 specimens.—Hindwing: yellow spot in cell isolated; discal yellow band reaching to abdominal margin.

♀. Similar to ♀ of *D. ph. hyperapproximata*.—Forewing, upperside, with two subapical yellowish spots; terminal black band covering extreme apex of cell, 6 mm. broad at  $M^2$ .—Hindwing with traces of three submarginal yellowish white dots; terminal band 4.5 mm. wide at  $R^2$ ; white area penetrating to fringe below  $M^1$ , nearly to fringe above  $M^1$ .

Underside.—Yellowish white area of forewing as in *D. ph. hyperapproximata*, somewhat paler (faded?), not quite reaching anterior margin of cell; terminal band 5 mm. wide at  $M^2$ .—Hindwing: orange cell-spot nearly isolated; median band narrower than in *D. ph. hyperapproximata*, orange spots within it deeper orange, first partition (C- $SC^2$ ) of band transversely somewhat wider than it is long midway between the veins.

*Hab.* Eastern New Guinea: West side of Herzog Mts., Edie Creek 6,100 ft., 4 ♂♂, 1 ♀.

### NYMPHALIDAE: SATYRINAE.

#### 7. *Pieridopsis ducis* sp. nov. (text-fig. 1).

Upperside milky white, slightly glossy, less creamy than in *P. virgo* R. & J. 1905; white bands of underside sharply defined, on forewing a prominent submarginal white line.

♂. Body dark brown, hairs of upperside more or less grey, especially on thorax; underside of abdomen grey; segments I and II of palpus greyish white, long hairs brown. On inner surface of shaft of antenna scaling white at bases of segments, on outer surface white from base to apex of segments.

Wings; underside.—Forewing milky white from base close to discocellulars, the costal margin olive-brown, the white area distally extending across costal vein and posteriorly about 3 mm. distant from termen, its outer margin almost straight from below  $M^1$  to costa; 8 mm. from apex two white dots at costal margin, one behind the other.—Hindwing milky white, termen (and fringe) narrowly black, the border gradually widening posteriorly, anal lobe black with a white line; abdominal margin brownish black.

Underside dark sepia, with sharply defined creamy white bands.—Forewing: abdominal margin white except at termen; beyond middle of cell from close to costal margin a band  $1\frac{1}{2}$  mm. broad, ending at  $M$  in between  $M^1$  and  $M^2$  or extending to white area of posterior (= abdominal = inner) margin; at

8 mm. from apex a white line, about  $\frac{3}{8}$  mm. broad, parallel with cell-band, and about 3 mm. from termen a somewhat thinner line parallel with termen, the two lines meeting in front of or at  $M^2$ , in the triangular space between them four minute white dots (remnants of ocelli); close to termen, but separate from margin, an inconspicuous greyish brown line continuous from near apex to near termen; posterior margin white except at termen, varying in width.—On hindwing a large creamy white V open at costal margin, composed of a band parallel with abdominal margin and commencing near base at costal margin, and a median band which joins the former at lower angle of cell, each about  $1\frac{1}{2}$  mm. broad, apex of V about halfway between cell and anal angle; parallel with termen a creamy white submarginal band,  $1\frac{1}{2}$  or 2 mm. wide anteriorly, tapering posteriorly, not quite reaching  $M^1$ ; near margin a thin, continuous, white line widened on anal lobe into a spot; at and near abdominal margin two similar lines, of which the posterior one joins the subterminal line; between submarginal band and V a row of minute white dots, anal lobe black, in front of it, between  $M^1$  and  $M^2$ , an inconspicuous ocellus consisting of a minute white central dot, a black pupil (diameter about  $1\frac{1}{2}$  mm.) and an obscure brownish outer ring.

Neuration:  $M^1$  of forewing midway between  $R^2$  and  $M^2$  (in *P. virgo*  $M^1$  nearer to  $R^2$ ).

Genitalia: Anal tergite (X. t., text-fig. 1) shorter than in *P. virgo*, apically compressed. Lateral spur (X. st.) of anal segment much shorter than in *P. virgo*, not curved upwards above the level of X. t. Clasper (Cl) apically narrower than in *P. virgo*, its ventral margin not excurved in proximal half. Ventral portion of penis-funnel narrower than in *P. virgo*.

Length of forewing: 21 mm.

*Hab.* Eastern New Guinea: West side of Herzog Mts., Edie Creek, 6,100 ft.; 2 ♂♂.

#### 8. *Erycinidia hemileuca* sp. nov.

Upperside of forewing black, an oblong bar across cell and a thin vestigial line on disc white; hindwing white, with narrow black margins.

♂. Body above dark olive. underside grey, long hairs of palpus dark brown. Shaft of antenna with white scales at bases of segments on inner side, more extended white on outer side.

Wings, upperside; forewing black, slightly olivaceous towards base; before apex of cell a white bar nearly 2 mm. broad and 4 mm. long, not quite reaching costal edge, and so placed that its distal margin is a little beyond the point of origin of  $M^1$ ; halfway to apex a small (single or double) white spot close to costal edge continued by a diffuse greyish line, slightly curved and disappearing about 3 mm. from termen at  $M^2$  or  $M^1$ .—Hindwing in shape similar to that of *E. maudei* Joie. & Talb. 1916, white with a faint bluish (milky) tone, costal and terminal margins black, the border about  $1\frac{1}{2}$  mm. broad, narrower towards anal lobe, bearing a thin white admarginal line from tail to near apex, abdominal area and base suffused with brownish black; before tail, between  $M^1$  and  $M^2$ , a minute black dot.

Underside greyish drab.—Forewing: a white cell-bar as above, but somewhat narrower and more sharply defined, parallel with it a narrow white discal line from costa to  $M^2$  (or nearly), of even width, area between these white markings blackish brown, outside discal line three ocelli from subcostal fork backwards,

inconspicuous, upon which follows an undulate blackish, indistinct line parallel with termen.—Hindwing: base and abdominal area shaded with grey scales; a thin, brown, broken line from near costal margin to abdominal area, crossing cell near origin of  $M^2$ , where it forms the outer boundary of a small whitish spot; from beyond middle of costal margin straight towards anal lobe, which it does not reach, a white band sharply defined on basal side by brown and gradually shading off on distal side; a row of five submarginal ocelli, of which the last, before tail, deep black, the others paler, all with buffish ring; an undulate brown line nearly parallel with termen, disappearing posteriorly, where its silvery outer border forms a white line; close to termen a clayish line bounded on both sides by a brown line.

Neuration as in *E. gracilis* R. & J. 1905.

Genitalia: Anal tergite (uncus) slightly compressed beyond middle, apex feebly spathulate, rounded, strongly convex above. Lateral spur (X. st.) of anal segment curved upwards and then down and inwards, extending beyond apex of tergite, gradually narrowing to a sharp point. Clasper ventrally strongly convex near base.

Length of forewing: 20–22 mm.

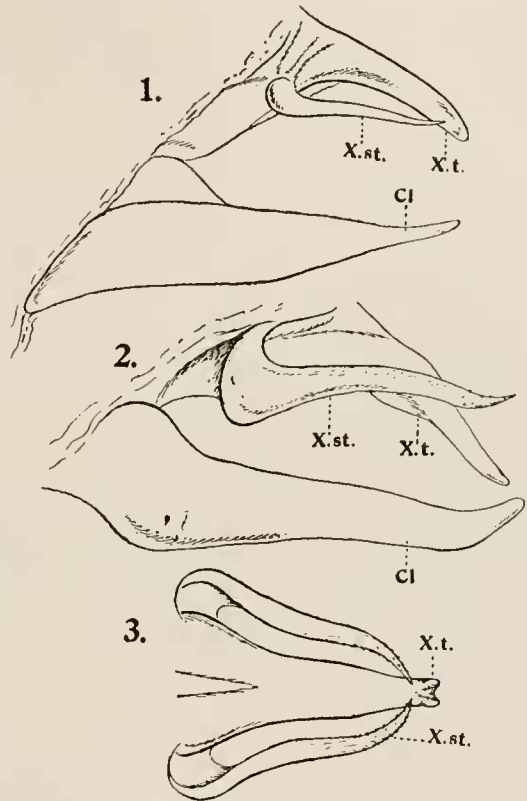
*Hab.* Eastern New Guinea: West side of Herzog Mts., Edie Creek, 6,100 ft., 3 ♂♂.

9. *Erycinidia tenera* sp. nov. (text-figs. 2 and 3).

Similar to *E. gracilis* R. & J. 1905, darker above, with a median and a discal grey band which unite at posterior margin and are shaded over with seal-brown on upperside.

♂. Body olivaceous seal-brown above, grey beneath; most of the long hairs of palpus seal-brown. Segments of shaft of antenna on inner side white at bases, on outer side almost entirely white.

Wings, upperside, olivaceous seal-brown.—Forewing: a median band from near costal margin to hind margin, which it reaches beyond middle, nearly 2 mm. wide, narrower at costa, a discal band slightly incurved above its middle and anteriorly and posteriorly a little curving basad joins median band at hindmargin, both bands greyish sepia, this brown colouring extending to base from cell to





hindmargin, interspace between these shadowy bands seal-brown,  $3\frac{1}{2}$  mm. wide in front and 2 mm. behind.—Hindwing somewhat broader anteriorly than in *E. gracilis*; a seal-brown line from middle of costal margin in direction of tail, which it does not reach, the line shading off on proximal side, better defined on outer side, the ground of wing here being somewhat paler; before tail a small black spot with white central dot, further forward faint indications of other ocelli.

Underside greyish drab.—Forewing: median and discal bands nearly as above, but almost white, a submarginal, dark sepia, crenulate line from  $SC^4$  to  $R^3$ , where it merges into a broadish, diffuse, dark sepia band, proximally of it below subcostal fork two inconspicuous ocelli and near termen a trace of a dark brown line.—Hindwing: from one-third of costal margin to below  $M^2$  a thin brown line, more or less dentate on proximal side at veins, excurved between veins, on submedian fold sharply broken basad—abdominad, along basal side of line a whitish grey diffuse band; parallel with this line a discal one, commencing just beyond middle of costal margin and directed towards tail, which it does not reach, being posteriorly sharply bent basad—abdominad; along outside of this line a diffuse whitish grey band, fading away posteriorly, as does the antemedian grey band; in greyish distal area a row of five ocelli, first and second larger than third and fourth, iris of fifth deep black; near termen two sepia-brown lines, of which the inner is crenulate, interspace between the outer one and dark sepia marginal line slightly clay-colour.

Neuration as in *E. gracilis*.

Genitalia: Anal tergite (= uncus, X. t., text-figs. 2 & 3), instead of being compressed in middle and apically strongly convex above and rounded at tip, is flattened distally and gradually narrowed to apex, which is sinuate-bidentate. Lateral spur (X. st.) broader and shorter than in the other known species, not reaching to apex of X. t., with the sharp tip curved upward. Clasper (Cl) in proximal half broader and in apical half narrower than in *E. gracilis*, apex more sharply pointed.

Length of forewing: 18 mm.

Hab. Eastern New Guinea: West side of Herzog Mts., Edie Creek, 6,100 ft. 1 ♂.

## RIODINIDAE.

### 10. *Praetaxila weiskei huonis* subsp. nov.

♀. Differs from ♀ of *P. w. weiskei* R. & J. 1901 in the white cell-bar on upper side of forewing being much shorter and separated from white band, interspace at hindmargin of cell 3 mm., white band narrower than in *P. w. weiskei* from cell backwards, its distance from cell 3 mm. at  $M^1$  and 9 mm. at  $M^2$ , last spot 6 mm. long.—On underside the black discocellular spot continued as a band to near hindmargin; white band essentially as above; white cell-bar longer than above, but as widely separate from band as above. Orange colouring of termen of hindwing brighter than in *P. w. weiskei* ♀.

Hab. Eastern New Guinea: West side of Herzog Mts., Edie R., 6,100 ft., one ♀.

## LYCAENIDAE.

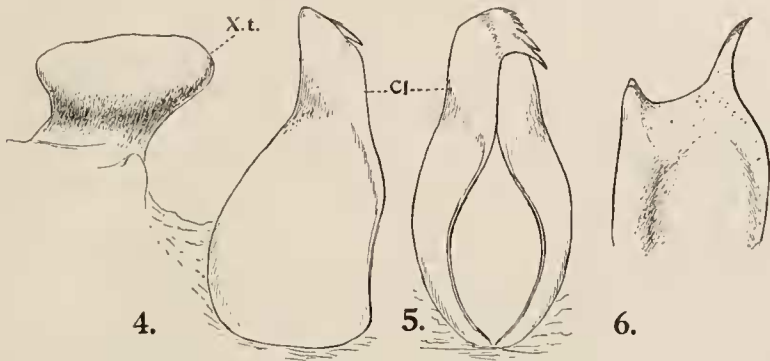
### 11. *Candalides hemileuca* sp. nov. (text-fig. 6.)

♂. Body olivaceous black above, white beneath; frons white at eyes; shaft of antenna ringed with white; palpus olivaceous black above, white beneath.

Wings, upper side.—Forewing olivaceous black, apex pointed, distal margin nearly straight; long hairs of posterior margin white.—Hindwing white, slightly creamy, basal area olivaceous black except at costal margin, not quite extending to base of  $M^1$ , long hairs on this patch milky white.

Under side cream colour, a little deeper yellow at base of costal margin of hindwing; forewing from middle of cell to hindmargin and to tornus white.

Genitalia: Anal tergite broad, divided into two broad, obtuse, lobes as usual in this genus; on each side a sternal prong, long, slender, sharply pointed, first directed frontad and the curved anad, the distal arm being the longer. Clasper (text-fig. 6) truncate at apex, broad, with two conical teeth at apical margin, the



one dorsal, short, directed straight backward, the other subventral, longer, sharper, somewhat curved laterad and ventrad.

Length of forewing: 13–14 mm.

*Hab.* Eastern New Guinea: West side of Herzog Mts., Edie R., 6,200 ft., 2 ♂♂.

## 12. *Celastrina leucothelia* sp. nov. (text-figs. 4 & 5).

Allied to *C. drucei* B. Baker 1906 (described as a *Cyaniris*); upper side of ♀ white, with broad black terminal border on forewing.

♂. Upper side of wings campanula-blue, with a white tint, though there are no white scales on the wing-surface; androconia fan-like, a little longer than broad (apart from pedicel), apex moderately rounded; both wings narrowly margined with black, terminal black border of forewing 1 mm. broad, that of hindwing much narrower, widening at apex; long scales of fringe of hindwing and around tornus of forewing white.

Under side dull greyish white, resembling old silver, markings pale sepia.—On forewing a discocellular bar, at distal side of point of bifurcation of subcostals ( $SC^4$  and  $SC^5$ ) a slightly oblique bar to  $R^1$ , from  $R^1$  to  $M^2$  a continuous submarginal line, at  $R^1$  2.5 mm. from fringe, posteriorly a little nearer to the termen, the 4 bars composing the line at right angles to the veins, the last two bars slightly incurved; near termen a row of 7 inconspicuous dots; termen itself very narrowly pale sepia-colour; shorter scales of fringe white.—Hindwing: a narrow discocellular bar; between it and base a row of 4 spots, second in cell bar-like, more or less broken up into 2 spots, third below cell, more proximal, subrotundate, fourth near abdominal margin, more distal than the others; on

disc from C to SM<sup>2</sup> a line of 7 bars, first, third and seventh nearly straight, the others more or less anguliform, first and second much more proximal than third and fourth, which are halfway between cell and termen, fifth and sixth again nearer cell, but in a line with third, fourth and seventh; near termen a row of 7 dots, the last double, all sepia-brown; extreme termen likewise pale sepia-colour; fringe white, with pale brown dots at ends of veins.

♀. Body, above, black, shaded with white scaling, long hairs of pronotum pale brown.—Wings, upperside, white.—Forewing shaded with black at extreme base; between cell and costal edge pale greyish brown, with a faint metallic green sheen in oblique light; a broad black terminal border, touching upper angle of cell, its proximal boundary curved, crossing M<sup>1</sup> beyond middle and reaching almost exactly to apex of SM<sup>2</sup>, the boundary somewhat diffuse under the less; fringe of termen pale sepia, white at tornus.—Hindwing shaded with black about to middle of cell; a very thin terminal line brownish black; fringe white, with brown spots at ends of veins; traces of brown subterminal dots anteriorly and posteriorly.

Underside as in ♂; discal bars of forewing straighter, not anguliform; discal spots near lower angle of cell of hindwing smaller and a little more proximal than in ♂.

Genitalia of ♂: Lobe of anal tergite (X. t., text-fig. 4) constricted at base, apically broader (in a vertical sense) than long (in a horizontal sense), in aspect from apical side irregularly pisiform; no X. st.; elasper (Cl) in basal half broadened dorsally and incurved ventrally, subconstricted above middle (cf. text-figs. 4 & 5); apex curved mesad, with a row of sharp, conical, marginal teeth, of which the ventral one is the longest, left clasper with 5 teeth above the long one and right clasper with 3.

Length of forewing: ♂♀ 15 mm.

Hab. Eastern New Guinea: West side of Herzog Mts., Edie R., 6,200 ft., one pair, type ♂.

## ZYGAEIDAE.

### *Atelesia* gen. nov.

♂. Frons broader than the eye is high. Forewing: 4 subcostals, SC<sup>2</sup> being absent; no transverse veinlets from C to costal margin; R<sup>1</sup> from cell, R<sup>2</sup> and R<sup>3</sup> close together from cell; M<sup>2</sup> on a level with SC<sup>1</sup>; hindwing: SC<sup>2</sup> well separated from R<sup>1</sup> and the cross-vein between them missing (cell open at upper angle), but SC<sup>2</sup> with a vestige of an angle as remnant of the missing vein, this angle farther distal than tip of closed portion of cell.—Genotype: *A. nervosa* sp. nov.

Near *Docleopsis* Jord., 1907, but distinguished by the broader frons, the absence of costal veinlets and the open cell of hindwing.

### 13. *Atelesia nervosa* sp. nov.

♂. Antenna and body black; hindmargins of head and of thoracic and abdominal tergites as well as middle of frons creamy buff; palpus, margins of thoracic sternites, legs and underside of abdomen somewhat deeper yellow, laterally the margins of abdomen orange.

Wings, upperside.—Forewing olivaceous black, all veins and hindmargin



light ochraceous, these lines very narrow, not quite reaching to fringe of termen. —Hindwing dull orange-ochraceous, shaded with olivaceous black in cell and between veins except from  $R^2$  forward, the abdominal area olivaceous black, with two lines and the abdominal-marginal fringe dull orange-ochraceous; an olivaceous black terminal border about 1.5 mm. broad, indented on the veins, and merging into the blackish abdominal area.

**Underside.**—Forewing: orange-ochraceous lines broader than above, especially in proximal three-fourths. —Hindwing brighter orange-ochraceous than above, with hardly any blackish scaling from costal margin to well below cell, apart from a short streak in base of cell; terminal border olivaceous black, indented on the veins, tapering behind, about 1.5 mm. broad anteriorly.

**Genitalia:** Anal tergite, in dorsal aspect, much broader than long, broadly sinuate, the apical lobes triangular, turned ventrad and not visible from above; anal sternite likewise broad, with a straight, strongly chitinized conical process each side. Clasper with two long and rather slender processes: the dorsal one sabre-shaped, gradually but not strongly curved downward, its upper inner margin membranous; lower process feebly chitinized, pale, straight, slightly tapering, not quite so long as upper process.

**Hab.** Eastern New Guinea: West side of Herzog Mts., from between Watut R. and Buiang, 2300–5400 ft., 1 ♂.

#### 14. *Eusphalera pernitens* f. *aspila* nov.

The species occurs in two forms: (a) f. *pernitens* Jord. 1925, hindwing, above and below with a creamy white patch across apex of cell, and forewing, below, with the blue area bounded by a narrow white median band. One pair from Rawlinson Mts. and a ♂ from Edie Creek. —(b) f. *aspila* nov., without the white markings of the preceding form. One ♂ and two ♀♀ from: Eastern New Guinea, West side of Herzog Mts., Edie Creek, 6,100 ft.

#### *Herpolasia augarra ducalis* subsp. nov.

♀. White spots of forewing a little smaller than in *H. a. augarra* R. & J. 1905; black terminal border of hindwing, above, more sharply defined, of nearly even width and 4 to 5 mm. broad.

**Hab.** Eastern New Guinea: West side of Herzog Mts., Edie Creek, 6,100 ft., 3 ♀♀.

#### 15. *Hemiscia parthenia* sp. nov.

♀. Close to *H. meeki* Roths. 1896. Pectinations of proximal segments of antenna much shorter, the fifth branch of inner side not nearly reaching to base of seventh branch, whereas in the various subspecies of *H. meeki* the fifth reaches to base of eighth or at least beyond base of seventh. Frons narrower than in *H. meeki*. Posterior margin of pronotum, apical half of mesonotum, the entire metanotum and first abdominal tergite, apical margins of abdominal sternites, apices of coxae and undersides of femora white (on thorax above and below here and there white scales, but specimen too much worn to show exact distribution of colours on thorax). Body otherwise as in *H. meeki*.

Wings, **upper side**, creamy white to beyond middle, the extreme base green. —Forewing: costal edge very narrowly black; white area extending to near base of  $M^1$ ; distal area black, veins green, a subcostal and a subterminal

white dot vestigial, fringe white at apex of wing.—Hindwing: white area reaching close to base of  $R^3$ , black area not extending to anal angle, veins and extreme terminal margin blue, fringe white at apex of wing.

Under side nearly as above.—Forewing with short bluish green costal streak at base; metallic sealing on veins of distal area blue; the two white spots larger than above.—Hindwing: no metallic sealing at base; near apex two white spots, one close to costal margin, the other subterminal, metallic sealing around anterior spot and proximally of it, terminal band from second spot towards anal angle, but ending at white area, and veins blue.

Neuration as in *H. meeki*; but  $M^2$  of hindwing more proximal, originating almost exactly from middle of cell.

Length of forewing: 22 mm.

*Hab.* Eastern New Guinea: West side of Herzog Mts., from between Watut R. and Buiang, 3200–5400 ft., 1♀.

#### 16. *Hemiscia meeki lota* subsp. nov.

♀. All the scales of chaetosema of head white. Wings as in *H. m. acelis* Jord. 1907 from Southern New Guinea, but white area of forewing extending to near base of  $M^1$  as in *H. m. fergussonica* Jord. 1907 from Fergusson and *H. m. meeki* Roths. 1896 from Woodlark I.; subapical white spots vestigial on upper side.

*Hab.* North-eastern New Guinea: Stephansort, 1♀.

#### 17. *Hemiscia meeki anthera* subsp. nov.

♂. White band of forewing, above and below, narrower, white spot of hindwing smaller than in *H. m. meeki*, and above not produced basad along costal margin.

♀. White area barely reaching to base of  $M^2$  on forewing and extending only a little beyond base of  $M^1$  on hindwing (not reaching lower cell-angle); subapical white spots of forewing above distinct.

*Hab.* Eastern New Guinea: Kumusi R., low elevation, VI., VIII.–IX. (A. S. Meek), one pair.

#### 18. *Hemiscia meeki placiva* subsp. nov.

♂. Like *H. m. meeki*, but band of forewing of even width, broader and reaching to hindmargin. White patch of hindwing extended to below  $M^1$ , its portion below cell narrow and shaded with black-brown, anteriorly the patch produced basad.—On under side, band of forewing widened behind. Patch of hindwing prolonged as a band which narrows posteriorly and nearly reaches fringe in front of anal angle.—Hindmargin of head orange below as well as at sides and above.

♀. White area of upper side extending on forewing just beyond base of  $M^2$ , on hindwing beyond base of  $M^1$ ; subapical spots of forewing as large as in *H. m. fergussonica* Jord. 1907; hindwing with a white subterminal spot between  $R^2$  and  $R^3$ .—On under side subterminal spot rounded, nearly 3 mm. wide, much larger than the subcostal spot. On hindwing a small subcostal spot and between  $R^2$  and  $M^2$  an elongate subterminal one white, more or less shaded with blue.

*Hab.* Louisiade Archipelago: Rossel I., Mt. Rossel, 2,100 ft., XII. 1915 (W. F. Eichhorn), one pair.

#### AGARISTIDAE.

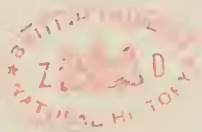
##### 19. *Argyrolepidea concisa stilbalis* subsp. nov.

♂♀. Discal band of upper side of forewing broader than in *A. c. concisa* Jord. (in Seitz, Macrolep. XI., p. 23, 1912), of the Snow Mts. in Dutch N. Guinea, its anterior half narrower than posterior half, measuring about 2.5 mm. at  $M^1$ ; white patch of hindwing larger, less regular, extending farther distad in middle, outwardly incurved before and behind its median portion, bordered with blue all round, veins within the patch likewise blue.

On underside the discal band of forewing somewhat broader than above; blue scaling of hindwing more extended than in *A. c. concisa*.

In ♂ abdominal sternite VII bluish white in middle, while in *A. c. concisa* it is black.

*Hab.* British New Guinea: Hydrographer Mts., 2,500 ft., I., II., & III. 1918 (Eichhorn Bros.), a short series of both sexes.



1930  
PURCHASED